PROCESS FOR THE PRODUCTION OF FOAM AND A SPRAYING MEANS FOR USE IN CLEANING VEHICLES, HOUSES, AND ANIMALS, IN COMBATING HARMFUL INSECTS, PLANT DISEASES AND FIRES, AS WELL AS AN APPARATUS FOR IMPLEMENTING THE PROCESS

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UNITED STATES PATENT AND TRADMARK OFFICE
WASHINGTON D.C. OCTOBER 2005
TRANSLATED BY THE RALPH MCELROY TRANSLATION COMPANY

ITALIAN REPUBLIC

MINISTRY OF INDUSTRY AND COMMERCE

CENTRAL OFFICE FOR PATENTS FOR INVENTIONS, DESIGNS AND TRADE MARKS

PATENT FOR AN INDUSTRIAL INVENTION NO. 463923

Class: V-b

Filing Date: July 2, 1949

Granting Date: June 12, 1951

Priority

Date: July 26, 1948

No.: 36659

Country: Switzerland

PROCESS FOR THE PRODUCTION OF FOAM AND A JET OF IT FOR USE IN CLEANING VEHICLES, HOUSES, LIVING BEINGS IN COMBATING HARMFUL INSECTS, PLANT DISEASES AND FIRES, AS WELL AS AN APPARATUS FOR IMPLEMENTING THE PROCESS

[Procedimento per la produzione de schiume ed il getto di esse, per l'uso nella pulizia di veicoli, case, esseri, viventi, nella lotta contro gli insetti nocivi, le malattie delle painte e gli incendi, nonché dispositivo per l'attuazione del processo]

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The subject of the present invention is a process for the production of and a spraying means for foam, according to which the production and the spraying means for foam take place in separate spaces and the foams are transported from the production site to the nozzle by means of a duct, with maximum utilization of the force of the foam and its foam-generating means.

Utilizing dampening and grime-dissolving foam, this process can be used in cleaning vehicles such as automobiles, trucks, bicycles, etc., as well as immobile objects such as the internal and external walls of houses, furnishings, and animals (e.g., cows). It can also be used in combating harmful insects and plant diseases, and for extinguishing fires.

The invention also refers to an apparatus for implementing the process of the invention, comprised of a boiler for producing the foam and an apparatus for the nozzle, the which apparatus is separated from the boiler by a space while it is connected by a duct.

The attached drawing shows two embodiment examples of the apparatus for implementing the process of the invention.

Figure 1 shows a cross section through a boiler in which the production of foam is effected by air.

Figure 2 is a cross section of the same type of boiler connected to a cylinder of carbon dioxide.

Boiler 1 contains a foam-generating substance 2, e.g., in aqueous solution. In the lower part of the boiler 1 there is a distribution arrangement 3 connected to a duct 4, through which air under a high pressure can be conveyed. 5 is a duct that connects the boiler 1 to a jet arrangement comprised, e.g., of a gate 6 that can have various profiles. The compressed air conveyed in boiler 1 through the duct 4 and the distributor device 3 produces an intense development of foam in the upper part of the boiler and this foam is impelled due to the pressure produced by the compressed air through the duct 5 and is sprayed on the object to be treated by means of the nozzle apparatus. The compressed air serves here both as foam generation and as a means of conveying the generated foam to the nozzle apparatus. As was ascertained, the force of the foam can be used to the maximum by means of this apparatus, and respectively the method described.

By using dampening and grime-dissolving foam, the processed described and the apparatus, as already indicated, can be applied for cleaning purposes. The process can also be used, by applying appropriate foam-generating means, for combating harmful insects and plant diseases.

Figure 2 illustrates the distributor device 3 of the boiler 1 connected to a carbon dioxide cylinder 7 by means of the duct 4. The carbon dioxide under pressure generates the foam in the boiler 1. Conveyance to the opening of the nozzle is used as a means for extinguishing fires because such foams, as is known, suffocate flames very rapidly. The apparatus according to Figure 2 can thus be used as a fire extinguisher.

Claims

1. Process for the production and the spraying means for foam, characterized in that the production and the spraying means for foam occur in separate spaces and the foam is conveyed from the site of production to that of a nozzle by means of a duct, so that the force of the foam from the foam-generating means is utilized to a maximum.

2. Apparatus for implementing the process according to the preceding claim, characterized by a boiler for the production of foam and that a space separates it from a boiler while it is connected with the latter by means of a duct.

3. Process according to Claim 1, characterized in that the foam generation is affected by air, which at the same time forces the foam toward the point of the jet through the duct.

4. Process according to Claim 1 for extinguishing fires, characterized in that the foam production is effected by means of carbon dioxide, which at the same time forces the foam through the duct and serves as a means for extinguishing fires.

5. Apparatus according to Claim 2, characterized in that in the lower part of the boiler there is a distributor device that is connected to a duct for the flow of a foam-generating means.

One page of drawings attached.

Fig.1

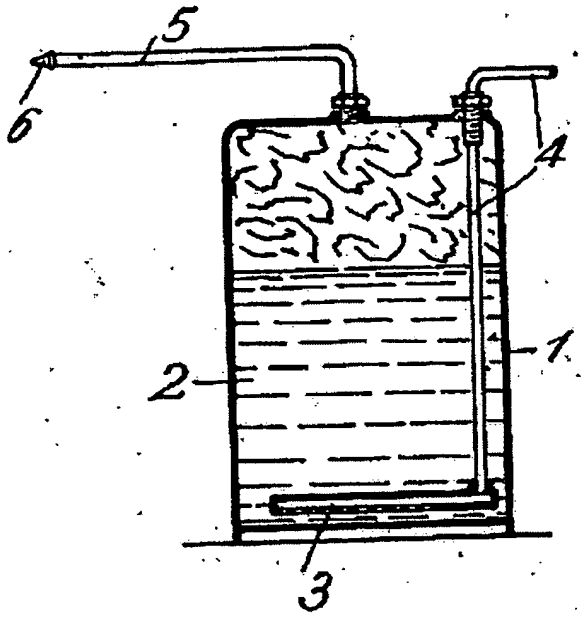

Fig.2